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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/511,296   | 10/15/2004  | Dirk Petring         | DE0301302           | 2161             |
| 30008  | 7590        | 06/19/2006           | EXAMINER            |                  |
| GUDRUN E. HUCKETT DRAUDT<br>LONSSTR. 53<br>WUPPERTAL, 42289<br>GERMANY |             |                      | HEINRICH, SAMUEL M. |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1725                |                  |

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/511,296

Applicant(s)

PETRING, DIRK

Examiner

Samuel M. Heinrich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-25, 28-41 and 43-47 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 22-25, 28-41 and 43-47 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 15 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/17/06.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22-25, 28-41, and 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 5,337,323 to Rokugawa et al in view of either of USPN 3,617,896 to McCurnin et al or USPN 3,984,986 to Reas. AAPA discloses (Specification pages 1-4) well known hybrid technology and describe (Specification page 2) well known pulse modulation for both temporal and permanent control. Rokugawa et al describe (BSTX 11) well known control means for both the master and slave laser elements "controlling a driving current for the slave semiconductor laser element by following the control of the driving current

for the master semiconductor laser element.” Both McCurnin et al and Reas describe well known master and slave tool relationship with respect to control of phase modulation. The use of synchronous master and slave control of AAPA hybrid systems would have been obvious at the time applicant’s invention was made to a person having ordinary skill in the art because AAPA describes well known combinations of hybrid systems and pulse modulation and because Rokugawa et al describe well known synchronized pulse modulation of plural laser sources and because both McCurnin and Reas describe more particular synchronizing control with phase modulation.

Claims 22-25, 28-41, and 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant’s Admitted Prior Art (AAPA) in view of USPN 4,685,111 to Baer in view of either of USPN 3,617,896 to McCurnin or USPN 3,984,986 to Reas.

AAPA discloses (Specification pages 1-4) well known hybrid technology and describe (Specification page 2) well known pulse modulation for both temporal and permanent control. Baer describe (e.g., Abstract) well known phase stabilization of plural lasers. Both McCurnin et al and Reas describe well known master and slave tool relationship with respect to control of phase modulation. The use of synchronous master and slave control of AAPA hybrid systems would have been obvious at the time applicant’s invention was made to a person having ordinary skill in the art because AAPA describes well known combinations of hybrid systems and pulse modulation and because Baer describe well known phase stabilization of plural laser sources.

Claims 28, 29, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant’s Admitted Prior Art (AAPA) in view of USPN 5,337,323 to

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Rokugawa et al in view of either of USPN 3,617,896 to McCurnin et al or USPN 3,984,986 to Reas as applied to claims 22 and 37 above, and further in view of USPN 4,817,106 to Thompson. Thompson describes master and slave laser interaction and describe both antiphase and in phase operation. The operation of AAPA in synchronous mode and in antiphase or in in phase operation would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because both operations are well known operating modes which provide different waveform modes.

Claims 28, 29, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 4,685,111 to Baer in view of either of USPN 3,617,896 to McCurnin or USPN 3,984,986 to Reas as applied to claims 22 and 37 above, and further in view of USPN 4,817,106 to Thompson. Thompson describes master and slave laser interaction and describe both antiphase and in phase operation. The operation of AAPA in synchronous mode and in antiphase or in in phase operation would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because both operations are well known operating modes which provide different waveform modes.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink that reads "Samuel M. Heinrich". The signature is written in a cursive, flowing style.

Samuel M Heinrich  
Primary Examiner  
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SMH